

# System Integration

## Course Introduction



Patrick Stolc  
M.Sc. Robotics Engineering

# Course Overview



## Architecture / topology of large systems

- Microservices vs. Monolithic
- Homogeneous vs. Heterogeneous systems
- Reliability, Scalability, Maintainability



## Class activities

- Writing code
- Applying theory

# Exam



## Oral Exam

- 30 minute individual exam based on your synopsis on a topics chosen by **you**
- Presentation of your synopsis topic, discussion of the topic and related topics



## Synopsis topics

- Microservice design patterns
- Technology comparison for a specific use case
- Deployment and CI/CD
- Monitoring and Observability
- ...

# Lectures



## You'll work on a single codebase throughout the course

- Practical activities of each lecture adds to the codebase
- You'll build something "large"
- You'll experience the pain of not writing maintainable code 😊



## Compulsory assignments

- Documentation, discussion and demonstration of your work